1. In the below elements which of them are values or an expression? eg:- values can be integer or string and expressions will be mathematical operators.

\*

'hello'

-87.8

-

/

6

**Answer:-**

**Values:-** ‘hello’ , -87.8 , 6

**Expressions:-** \*, - , / , +

2. What is the difference between string and variable?

**Answer:-**

String is the combination of characters or letters. While Variable is used to assign the strings.

**i.e. :** X = ‘ineuron’

in this example X is variable while ‘ineuron’ is a string.

3. Describe three different data types.

**Answer:-**  The three different data types are given below

**Intigers:-** it contains whole numbers. i.e.- 12345

**Floats:-** it contains decimal numbers. i.e. – 2.123

**Boolens:-** it represents truth table values means it has only two stats true or false or we can say yes or no.

4. What is an expression made up of? What do all expressions do?

**Answer:-** A combination of operators and operands is called expression. Expressions are the representation of values.

5. This assignment statements, like spam = 10. What is the difference between an expression and a statement?

**Answer:-** expression is made up of values ( 1,2,3,4) and mathematical operators ( +,-,\*,/,=).

While Statement is just like a command in Python ( print, clear ).

6. After running the following code, what does the variable bacon contain?

bacon = 22

bacon + 1

**Answer:-** After running the following code ( bacon +1) the variable bacon contain 23 because bacon = 22 is already given.

7. What should the values of the following two terms be?

'spam' + 'spamspam'

'spam' \* 3

**Answer:-** the value of both the following two terms is same after running them and the value is

‘spamspamspam’.

8. Why is eggs a valid variable name while 100 is invalid?

**Answer:-** eggs is a valid variable and 100 is invalid variable because a variable cannot begain with a number.

9. What three functions can be used to get the integer, floating-point number, or string version of a value?

**Answer:-** integer :- **int()**

Floating point number :- **float()**

String :- **str()**

10. Why does this expression cause an error? How can you fix it?

'I have eaten ' + 99 + ' burritos.

**Answer:-** this expression cause an error because we can perform only string concatenation and in this expression 99 is present.

We can fix it by changing 99 in the form of string.

The correct form of execution of the expression is given below

‘I have eaten ‘ + str(99) + ‘burritos’ .